ELSEVIER

Bioelectrochemistry and Bioenergetics 39 (1996) 315–316

BIOELECTROCHEMISTRY AND BIOENERGETICS

Author Index of Volume 39

Aihara, M. 135
Akatsuka, K. 309
Astumian, R.D. 67

Bagramyan, K.A. 13
Bara, M. 203
Becucci, L. 227
Berg, A. 291
Berg, H. 181
Bier, F.F. 221
Bier, M. 67
Blackman, C.F. 77
Blank, M. 215
Bojarska, E. 241
Bratkowski, W. 241
Bzowska, A. 241

Cao, G. 167
Čemažar, M. 61
Chi, Q. 267
Chramosta, O. 119
Cleary, S.F. 167
Correia dos Santos, M.M. 55
Czochralska, B. 241, 263

Davey, C.L. 185
De Graef, Ch. 209
Deng, J. 303
Dlugopolsky, J. 299
Dong, S. 95, 267
Dróżdż, M. 21, 27
Dutta, S.K. 259

Erceg, M. 129

Freire Lopes, C.M.L. 55

Gao, X.-X. 125
Garg, D.K. 249
Gášková, D. 195
Gift, E.A. 39
Goldshmidt, D. 209
Goodman, R. 215
Goyal, R.N. 249
Gräfe, U. 291
Grigoriev, P. 291
Gröbner, U. 181
Gu, L. 295
Guiet-Bara, A. 203
Gyeppessova, M. 299

Heenen, M. 209
Heidegger, W. 109
Hianik, T. 235, 299
Hinsenkamp, M. 209
Hinson, W.G. 175
Hoshi, S. 309
House, D.E. 77

Ibi, K. 83
Ibrahim, B. 203

Janderová, B. 195
Jerčinović, A. 209
Jin, M. 215
Jin, W. 221
Jurášková, V. 119

Kawata, Y. 89
Kawczyński, W. 241
Kawczynski, W. 263
Kazlauskaitė, J. 139
Kell, D.B. 185
Kobayashi, K. 83
Kojima, H. 89
Kovacic, P. 155
Krammer, B. 109
Kula, B. 21, 27, 31

Leveteau, J. 203
Lin, H. 215
Lindqvist, L. 263
Liu, H. 303
Liu, L.-M. 167
Liu, Y. 303
Lu, X. 275
Luo, Q.-H. 285

Makower, A. 221
Matsuoka, H. 115
Miklavčič, D. 61
Miura, Y. 135
Moncelli, M.R. 227

Nakamura, H. 309
Nazar, A.S.M.I. 259
Nicholson, D.J. 185
Niu, J. 95

Ogandjanian, E.S. 13, 161
Ottova-Leitmannova, A. 275, 295, 299

Paul, A. 259
Plášek, J. 195
Pliquett, U. 1, 39

Qian, J. 303
Qian, W. 285

Razumas, V. 139
Reboiras, M.D. 101
Rehák, M. 235

Saito, M. 115
Sawada, T. 83
Scarceriaux, B. 209
Scheller, F.W. 221
Schlegel, R. 291
Šemrov, D. 61
Serša, G. 61
Shen, M.-C. 285
Sigler, K. 195
Simões Gonçalves, M.L. 55
Sivak, B. 299
Šnejdárková, M. 235
Spataru, N. 89
Sugawara, K. 309
Sužnjević, D. 129
Swicord, M.L. 175

Takehara, K. 135
Tanaka, F. 135
Tanaka, S. 309
Tien, H.T. 275, 295, 299
Torrence, P.F. 263
Trchounian, A.A. 13, 161
Trillo, M.A. 77

Ubeda, A. 77

Vassilian, A.V. 13
Velizarov, S. 181
Vetterl, V. 119

Vidić, J. 129
Vidžiūnaitė, R. 139
Vučelić, D. 129

Wang, E. 267
Wang, L. 295
Weaver, J.C. 1, 39
West, R.W. 175
Willaert, F. 209
Wollenberger, U. 221

Xiao, Y.-J. 125
Xie, G.-Y. 125
Xun, J. 295

Yano, S.-i. 89
Yu, T. 303

Zakharian, E.G. 13
Zhang, J. 267
Zhang, Y. 125
Zhu, Y. 95

ELSEVIER

Bioelectrochemistry and Bioenergetics 39 (1996) 317–323

BIOELECTROCHEMISTRY AND BIOENERGETICS

Subject Index of Volume 39

Activity coefficients
Activity coefficients of $CaCl_2$ and $MgCl_2$ in the presence of dipalmitoylphosphatidylcholine–phosphatidylinositol vesicles in aqueous media (Reboiras) 101
Adsorption
Behaviour of β_2-microglobulin in the electrical double layer of the mercury|solution interface (Vidić et al.) 129
Adsorption isotherms
Polylysine supports electrofusion (Gröbner et al.) 181
AIDS dementia
Reaction intermediates of a dihydropyridine derivative of 2′,3′-dideoxycytidine related to AIDS dementia studied by laser flash photolysis (Kawczynski et al.) 263
Alternating current polarography
Behaviour of β_2-microglobulin in the electrical double layer of the mercury|solution interface (Vidić et al.) 129
Amphiphilic molecules
Effect of the molecular structure of more common amphiphilic molecules on their interactions with dioleoyl-phosphatidylcholine monolayers (Moncelli, Becucci) 227
Ampicillin resistance vector
Extracellular release of a recombinant gene product by osmotic shock from immobilized microalga in electroconductive membrane (Yano et al.) 89
Anchorage-independent growth
Anchorage-independent growth with JB6 cells exposed to 60 Hz magnetic fields at several flux densities (West et al.) 175
Anomalous heating
Determination of the electric field and anomalous heating caused by exponential pulses with aluminum electrodes in electroporation experiments (Pliquett et al.) 39
Antibiotic proton carriers
Protonophoric activities of helioferin and pamamycin, lipophilic tertiary amine antibiotics from *Mycogone rosea* and *Streptomyces aurantiacus* (Grigoriev et al.) 291
Antileukemic agent
Electrochemical and enzymatic study of 2-chloro-2′-deoxyadenosine (antileukemic agent) and related compounds (Czochralska et al.) 241
Artificial neural networks
Deconvolution of the dielectric spectra of microbial cell suspensions using multivariate calibration and artificial neural networks (Nicholson et al.) 185
Ascorbate oxidase
Electron transfer between cytochrome c and copper enzymes (Jin et al.) 221
ATPase
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 15. K^+-uptaking activity in glycolysing *Trk* mutants (Trchounian, Ogandjanian) 161
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 14. Comparison of K^+ uptake characteristics in anaerobically grown cells performing glycolysis or nitrate/nitrite respiration: role of the respiratory chain (Trchounian et al.) 13
ATP hydrolysis
Biased Brownian motion as the operating principle for microscopic engines (Bier, Astumian) 67
Avidin–biotin interaction
Electrochemical evaluation of avidin–biotin interaction using *N*-iodoacetyl-*N*-biotinylhexylenediamine (Sugawara et al.) 309

Batch culture
Relationship between electromotive force and batch culture process of an iron-oxidizing bacterium (Kobayashi et al.) 83
Bilayer lipid membrane
Photoelectric response of bilayer lipid membrane doped with some metallochlorophylls (Xiao et al.) 125
Bilayer lipid membranes
Electrostriction of biotin-streptavidin-modified bilayer lipid membranes on a metal support (Hianik et al.) 235
Stabilization of bilayer lipid membranes on solid supports by trehalose (Hianik et al.) 299
A new method for the determination of electrical properties of supported bilayer lipid membranes by cyclic voltammetry (Gu et al.) 295
Biomass estimation
Deconvolution of the dielectric spectra of microbial cell suspensions using multivariate calibration and artificial neural networks (Nicholson et al.) 185
Biomimetic models
Effect of the molecular structure of more common amphiphilic molecules on their interactions with dioleoyl-phosphatidylcholine monolayers (Moncelli, Becucci) 227
Biopolymer-supported electrofusion
Polylysine supports electrofusion (Gröbner et al.) 181
Biotin
Electrostriction of biotin-streptavidin-modified bilayer lipid membranes on a metal support (Hianik et al.) 235
Bleomycin
Changing electrode orientation improves the efficacy of electrochemotherapy of solid tumors in mice (Serša et al.) 61
BLMs
Biophysical aspects of agar-gel supported bilayer lipid nembranes: a new method for forming and studying planar bilayer lipid membranes (Lu et al.) 275
Blue–green alga
Extracellular release of a recombinant gene product by osmotic shock from immobilized microalga in electroconductive membrane (Yano et al.) 89

β_2-microglobulin
Behaviour of β_2-microglobulin in the electrical double layer of the mercury|solution interface (Vidić et al.) 129
Bone marrow
Effect of cadmium and 50 Hz electric and magnetic fields on bone marrow and tumour cells (Jurášková et al.) 119
Bromopyrogal red
Dynamic spectroelectrochemical measurement for the conformational transition of cytochrome c induced by bromopyrogal red (Zhu et al.) 95
Brownian motion
Biased Brownian motion as the operating principle for microscopic engines (Bier, Astumian) 67

Cadmium
Effect of cadmium and 50 Hz electric and magnetic fields on bone marrow and tumour cells (Jurášková et al.) 119
Calcium channels
Membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 203
Calcium chloride
Activity coefficients of $CaCl_2$ and $MgCl_2$ in the presence of dipalmitoylphosphatidylcholine–phosphatidylinositol vesicles in aqueous media (Reboiras) 101
Cancer promotion
Anchorage-independent growth with JB6 cells exposed to 60 Hz magnetic fields at several flux densities (West et al.) 175
Capacitance
A new method for the determination of electrical properties of supported bilayer lipid membranes by cyclic voltammetry (Gu et al.) 295
Carbonaceous electrode
Electrocatalytic reduction of hydrogen peroxide on the microperoxidase-11 modified carbon paste and graphite electrodes (Razumas et al.) 139
Catalase
A study on magnetic field effects on fibroblast cultures. Part 2. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on free-radical processes in fibroblast cultures (Kula, Dróżdż) 27
Cell differentiation
Melatonin prevents magnetic-field-induced neurite outgrowth in a subline of pheochromocytoma cells, PC12D (Ubeda et al.) 77
Cell synchronization
Effects of isothermal 2.45 GHz microwave radiation on the mammalian cell cycle: comparison with effects of isothermal 27 MHz radiofrequency radiation exposure (Cleary et al.) 167
Cellular protein
A study of magnetic field effects on fibroblast cultures. Part 1. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on vital functions of fibroblasts (Kula, Dróżdż) 21
Chemometrics
Deconvolution of the dielectric spectra of microbial cell suspensions using multivariate calibration and artificial neural networks (Nicholson et al.) 185
Chrondroitin sulphates
A study of magnetic field effects on fibroblast cultures. Part 3. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on glycosaminoglycan metabolism in fibroblasts, cell coats and culture medium (Kula) 31
Combined electric and magnetic field
Frequency-dependent alteration of enolase activity by ELF fields (Nazar et al.) 259
Conformation
Behaviour of β_2-microglobulin in the electrical double layer of the mercury|solution interface (Vidić et al.) 129
Continuous exposure
Electromagnetic field stimulation of biosynthesis: changes in c-*myc* transcript levels during continuous and intermittent exposures (Lin et al.) 215
Copper complexes
Voltammetric studies of purine bases and purine nucleosides with copper (Correia dos Santos et al.) 55
Copper enzymes
Electron transfer between cytochrome c and copper enzymes (Jin et al.) 221
CO_2 stress
Application of a multifunctional microelectrode to the in vivo analysis of the K^+ response to CO_2 stress (Saito, Matsuoka) 115
Crawford cell
Frequency-dependent alteration of enolase activity by ELF fields (Nazar et al.) 259
^{14}C-thymidine incorporation
A study of magnetic field effects on fibroblast cultures. Part 1. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on vital functions of fibroblasts (Kula, Dróżdż) 21
Cyclic voltammetry
A new method for the determination of electrical properties of supported bilayer lipid membranes by cyclic voltammetry (Gu et al.) 295
Cysteine–Hg complex
Electrochemical evaluation of avidin–biotin interaction using *N*-iodoacetyl-*N*-biotinylhexylenediamine (Sugawara et al.) 309
Cytidine derivative
Reaction intermediates of a dihydropyridine derivative of 2′,3′-dideoxycytidine related to AIDS dementia studied by laser flash photolysis (Kawczynski et al.) 263
Cytochrome c
Dynamic spectroelectrochemical measurement for the conformational transition of cytochrome c induced by bromopyrogal red (Zhu et al.) 95
Electron transfer between cytochrome c and copper enzymes (Jin et al.) 221

Dermatan sulphate
A study of magnetic field effects on fibroblast cultures. Part 3. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on glycosaminoglycan metabolism in fibroblasts, cell coats and culture medium (Kula) 31
Dielectric spectroscopy
Deconvolution of the dielectric spectra of microbial cell suspensions using multivariate calibration and artificial neural networks (Nicholson et al.) 185
5,6-Dihydroxytryptamine
Electro-oxidation of the neurotoxin 5,6-dihydroxytryptamine and effects of its oxidation products in mice (Goyal, Garg) 249
Dipeptide monolayer
An ion-gate response of the cysteine-containing dipeptide monolayers formed on a gold electrode. The effects of alkaline earth ions (Takehara et al.) 135
Direct constant electrical current (DC)
Effects of direct constant current (DC) on keratinocytes in vitro (Jerčinović et al.) 209
Dynamics of culture growth
A study of magnetic field effects on fibroblast cultures. Part 1. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on vital functions of fibroblasts (Kula, Dróżdż) 21

E. coli
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 15. K^+-uptaking activity in glycolysing *Trk* mutants (Trchounian, Ogandjanian) 161
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 14. Comparison of K^+ uptake characteristics in anaerobically grown cells performing glycolysis or nitrate/nitrite respiration: role of the respiratory chain (Trchounian et al.) 13
Elasticity modulus
Electrostriction of biotin-streptavidin-modified bilayer lipid membranes on a metal support (Hianik et al.) 235
Electrical properties
Electroporation of human skin: simultaneous measurement of changes in the transport of two fluorescent molecules and in the passive electrical properties (Pliquett, Weaver) 1
Electrical resistance
A new method for the determination of electrical properties of supported bilayer lipid membranes by cyclic voltammetry (Gu et al.) 295
Electrical stimulation
Effects of direct constant current (DC) on keratinocytes in vitro (Jerčinović et al.) 209
Electric field
Determination of the electric field and anomalous heating caused by exponential pulses with aluminum electrodes in electroporation experiments (Pliquett et al.) 39
Frequency-dependent alteration of enolase activity by ELF fields (Nazar et al.) 259
Electrocatalysis
Electrocatalytic reduction of hydrogen peroxide on the microperoxidase-11 modified carbon paste and graphite electrodes (Razumas et al.) 139
In situ electrochemical scanning tunnelling microscopy investigation of structure for horseradish peroxidase and its electrocatalytic property (Zhang et al.) 267
Electrochemotherapy
Changing electrode orientation improves the efficacy of electrochemotherapy of solid tumors in mice (Serša et al.) 61
Electroconductive membrane
Extracellular release of a recombinant gene product by osmotic shock from immobilized microalga in electroconductive membrane (Yano et al.) 89
Electron transfer
Electron transfer mechanism for regulatory action by nitric oxide (Kovacic) 155
Electron transfer between cytochrome c and copper enzymes (Jin et al.) 221
Electro-oxidation
Electro-oxidation of the neurotoxin 5,6-dihydroxytryptamine and effects of its oxidation products in mice (Goyal, Garg) 249
Electroporation
Electroporation of human skin: simultaneous measurement of changes in the transport of two fluorescent molecules and in the passive electrical properties (Pliquett, Weaver) 1
Determination of the electric field and anomalous heating caused by exponential pulses with aluminum electrodes in electroporation experiments (Pliquett et al.) 39
Electrostriction
Electrostriction of biotin-streptavidin-modified bilayer lipid membranes on a metal support (Hianik et al.) 235
Stabilization of bilayer lipid membranes on solid supports by trehalose (Hianik et al.) 299
ELF
Frequency-dependent alteration of enolase activity by ELF fields (Nazar et al.) 259
A study of magnetic field effects on fibroblast cultures. Part 1. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on vital functions of fibroblasts (Kula, Dróżdż) 21
A study of magnetic field effects on fibroblast cultures. Part 3. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on glycosaminoglycan metabolism in fibroblasts, cell coats and culture medium (Kula) 31
Melatonin prevents magnetic-field-induced neurite outgrowth in a subline of pheochromocytoma cells, PC12D (Ubeda et al.) 77
EMF of bacterium
Relationship between electromotive force and batch culture process of an iron-oxidizing bacterium (Kobayashi et al.) 83
Endothelial cells
Membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 203
Enolase activity
Frequency-dependent alteration of enolase activity by ELF fields (Nazar et al.) 259
Epidermal growth in vitro
Effects of direct constant current (DC) on keratinocytes in vitro (Jerčinović et al.) 209

Fe–NO complexes
Electron transfer mechanism for regulatory action by nitric oxide (Kovacic) 155
$FeSO_4$ substrate
Relationship between electromotive force and batch culture process of an iron-oxidizing bacterium (Kobayashi et al.) 83
F_1F_0 system
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 14. Comparison of K^+ uptake characteristics in anaerobically grown cells performing glycolysis or nitrate/nitrite respiration: role of the respiratory chain (Trchounian et al.) 13
Fibroblast cultures
A study of magnetic field effects on fibroblast cultures. Part 1. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on vital functions of fibroblasts (Kula, Dróżdż) 21
A study of magnetic field effects on fibroblast cultures. Part 3. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on glycosaminoglycan metabolism in fibroblasts, cell coats and culture medium (Kula) 31
Flash photolysis
Reaction intermediates of a dihydropyridine derivative of 2′,3′-dideoxycytidine related to AIDS dementia studied by laser flash photolysis (Kawczynski et al.) 263
Flow cytofluorometry
Effects of isothermal 2.45 GHz microwave radiation on the mammalian cell cycle: comparison with effects of isothermal 27 MHz radiofrequency radiation exposure (Cleary et al.) 167
Fluorescence
Electroporation of human skin: simultaneous measurement of changes in the transport of two fluorescent molecules and in the passive electrical properties (Pliquett, Weaver) 1
Fokker–Planck equations
Biased Brownian motion as the operating principle for microscopic engines (Bier, Astumian) 67
Formation constants
Voltammetric studies of purine bases and purine nucleosides with copper (Correia dos Santos et al.) 55

Fourier transform IR spectra
Dynamic spectroelectrochemical measurement for the conformational transition of cytochrome c induced by bromopyrogal red (Zhu et al.) 95

Glassy carbon
Immobilization of glucose oxidase in the composite membrane of regenerated silk fibroin and poly(vinyl alcohol): application to an amperometric glucose sensor (Liu et al.) 303
Glassy carbon electrode
Electrochemical evaluation of avidin–biotin interaction using *N*-iodoacetyl-*N*-biotinylhexylenediamine (Sugawara et al.) 309
Glucose sensor
Immobilization of glucose oxidase in the composite membrane of regenerated silk fibroin and poly(vinyl alcohol): application to an amperometric glucose sensor (Liu et al.) 303
Gold electrode
An ion-gate response of the cysteine-containing dipeptide monolayers formed on a gold electrode. The effects of alkaline earth ions (Takehara et al.) 135

Haematopoietic tissue
Effect of cadmium and 50 Hz electric and magnetic fields on bone marrow and tumour cells (Jurášková et al.) 119
Hairy cell leukemia
Electrochemical and enzymatic study of 2-chloro-2′-deoxyadenosine (antileukemic agent) and related compounds (Czochralska et al.) 241
2-Halogenodeoxyadenosines
Electrochemical and enzymatic study of 2-chloro-2′-deoxyadenosine (antileukemic agent) and related compounds (Czochralska et al.) 241
H^+ channel
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 15. K^+-uptaking activity in glycolysing *Trk* mutants (Trchounian, Ogandjanian) 161
Heat engine
Biased Brownian motion as the operating principle for microscopic engines (Bier, Astumian) 67
Helioferin
Protonophoric activities of helioferin and pamamycin, lipophilic tertiary amine antibiotics from *Mycogone rosea* and *Streptomyces aurantiacus* (Grigoriev et al.) 291
Heparan sulphate
A study of magnetic field effects on fibroblast cultures. Part 3. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on glycosaminoglycan metabolism in fibroblasts, cell coats and culture medium (Kula) 31
Highly oriented graphite (HOPG)
In situ electrochemical scanning tunnelling microscopy investigation of structure for horseradish peroxidase and its electrocatalytic property (Zhang et al.) 267
Horseradish peroxidase
In situ electrochemical scanning tunnelling microscopy investigation of structure for horseradish peroxidase and its electrocatalytic property (Zhang et al.) 267
Human fibroblasts
Investigation of the combined effect of photodynamic cell treatment and hyperthermia by transmembrane resting potential measurement of human skin fibroblasts (Krammer, Heidegger) 109
Human placenta
Membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 203
Human skin
Electroporation of human skin: simultaneous measurement of changes in the transport of two fluorescent molecules and in the passive electrical properties (Pliquett, Weaver) 1

Hydrogen peroxide
Electrocatalytic reduction of hydrogen peroxide on the microperoxidase-11 modified carbon paste and graphite electrodes (Razumas et al.) 139
Hyperthermia
Investigation of the combined effect of photodynamic cell treatment and hyperthermia by transmembrane resting potential measurement of human skin fibroblasts (Krammer, Heidegger) 109

Imidazolase bridging
A study on reduction potentials of porcine and bovine superoxide dismutase and dissociation of bridging imidazolate (Qian et al.) 285
In situ STM
In situ electrochemical scanning tunnelling microscopy investigation of structure for horseradish peroxidase and its electrocatalytic property (Zhang et al.) 267
Intermittent exposure
Electromagnetic field stimulation of biosynthesis: changes in c-*myc* transcript levels during continuous and intermittent exposures (Lin et al.) 215
In vivo analysis
Application of a multifunctional microelectrode to the in vivo analysis of the K^+ response to CO_2 stress (Saito, Matsuoka) 115
Ion binding
Activity coefficients of $CaCl_2$ and $MgCl_2$ in the presence of dipalmitoylphosphatidylcholine–phosphatidylinositol vesicles in aqueous media (Reboiras) 101
Ion-gate response
An ion-gate response of the cysteine-containing dipeptide monolayers formed on a gold electrode. The effects of alkaline earth ions (Takehara et al.) 135
Isothermal exposure
Effects of isothermal 2.45 GHz microwave radiation on the mammalian cell cycle: comparison with effects of isothermal 27 MHz radiofrequency radiation exposure (Cleary et al.) 167

JB6 cells
Anchorage-independent growth with JB6 cells exposed to 60 Hz magnetic fields at several flux densities (West et al.) 175

Keratinocytes
Effects of direct constant current (DC) on keratinocytes in vitro (Jerčinović et al.) 209
Killing efficiency
Effect of high-voltage electric pulses on yeast cells: factors influencing the killing efficiency (Gášková et al.) 195
Kluyveramyces lactis
Effect of high-voltage electric pulses on yeast cells: factors influencing the killing efficiency (Gášková et al.) 195
K^+ transport
Application of a multifunctional microelectrode to the in vivo analysis of the K^+ response to CO_2 stress (Saito, Matsuoka) 115

Laccase
Electron transfer between cytochrome c and copper enzymes (Jin et al.) 221
Leustatin
Electrochemical and enzymatic study of 2-chloro-2′-deoxyadenosine (antileukemic agent) and related compounds (Czochralska et al.) 241
Lipid bilayer
Biophysical aspects of agar-gel supported bilayer lipid nembranes: a new method for forming and studying planar bilayer lipid membranes (Lu et al.) 275

Lipophylic amines
Protonophoric activities of helioferin and pamamycin, lipophilic tertiary amine antibiotics from *Mycogone rosea* and *Streptomyces aurantiacus* (Grigoriev et al.) 291
Liposomes
Activity coefficients of $CaCl_2$ and $MgCl_2$ in the presence of dipalmitoylphosphatidylcholine–phosphatidylinositol vesicles in aqueous media (Reboiras) 101
Low frequency magnetic fields
Effect of cadmium and 50 Hz electric and magnetic fields on bone marrow and tumour cells (Jurášková et al.) 119
Lymphosarcoma
Effect of cadmium and 50 Hz electric and magnetic fields on bone marrow and tumour cells (Jurášková et al.) 119

Magnesium chloride
Activity coefficients of $CaCl_2$ and $MgCl_2$ in the presence of dipalmitoylphosphatidylcholine–phosphatidylinositol vesicles in aqueous media (Reboiras) 101
Magnetic fields
Anchorage-independent growth with JB6 cells exposed to 60 Hz magnetic fields at several flux densities (West et al.) 175
Mammalian cell cycle
Effects of isothermal 2.45 GHz microwave radiation on the mammalian cell cycle: comparison with effects of isothermal 27 MHz radiofrequency radiation exposure (Cleary et al.) 167
Mechanism
Electron transfer mechanism for regulatory action by nitric oxide (Kovacic) 155
Melatonin
Melatonin prevents magnetic-field-induced neurite outgrowth in a subline of pheochromocytoma cells, PC12D (Ubeda et al.) 77
Membrane permeability
Changing electrode orientation improves the efficacy of electrochemotherapy of solid tumors in mice (Serša et al.) 61
Membrane potential
Membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 203
Mercury electrode
Behaviour of β_2-microglobulin in the electrical double layer of the mercury|solution interface (Vidić et al.) 129
Messenger RNA
Electromagnetic field stimulation of biosynthesis: changes in c-*myc* transcript levels during continuous and intermittent exposures (Lin et al.) 215
Metallochlorophylls
Photoelectric response of bilayer lipid membrane doped with some metallochlorophylls (Xiao et al.) 125
Microperoxidase-11
Electrocatalytic reduction of hydrogen peroxide on the microperoxidase-11 modified carbon paste and graphite electrodes (Razumas et al.) 139
Microwave radiation
Effects of isothermal 2.45 GHz microwave radiation on the mammalian cell cycle: comparison with effects of isothermal 27 MHz radiofrequency radiation exposure (Cleary et al.) 167
Modified electrode
Immobilization of glucose oxidase in the composite membrane of regenerated silk fibroin and poly(vinyl alcohol): application to an amperometric glucose sensor (Liu et al.) 303
Molecular-mass effect
Polylysine supports electrofusion (Gröbner et al.) 181
Molecular structure
Effect of the molecular structure of more common amphiphilic molecules on their interactions with dioleoyl-phosphatidylcholine monolayers (Moncelli, Becucci) 227
Monitoring culture
Relationship between electromotive force and batch culture process of an iron-oxidizing bacterium (Kobayashi et al.) 83
Monod equation
Relationship between electromotive force and batch culture process of an iron-oxidizing bacterium (Kobayashi et al.) 83
Monolayers
Effect of the molecular structure of more common amphiphilic molecules on their interactions with dioleoyl-phosphatidylcholine monolayers (Moncelli, Becucci) 227
Multifunctional microelectrode
Application of a multifunctional microelectrode to the in vivo analysis of the K^+ response to CO_2 stress (Saito, Matsuoka) 115

Neurotoxins
Electro-oxidation of the neurotoxin 5,6-dihydroxytryptamine and effects of its oxidation products in mice (Goyal, Garg) 249
N-iodoacetyl-*N*-biotenylhexylenediamine
Electrochemical evaluation of avidin–biotin interaction using *N*-iodoacetyl-*N*-biotinylhexylenediamine (Sugawara et al.) 309
Nitric oxide
Electron transfer mechanism for regulatory action by nitric oxide (Kovacic) 155

O_2-maximum damping
Polylysine supports electrofusion (Gröbner et al.) 181
Osmotic shock
Extracellular release of a recombinant gene product by osmotic shock from immobilized microalga in electroconductive membrane (Yano et al.) 89
Ouabain
Membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 203
Oxidative stress
Electron transfer mechanism for regulatory action by nitric oxide (Kovacic) 155

Pheophytin
Photoelectric response of bilayer lipid membrane doped with some metallochlorophylls (Xiao et al.) 125
Phospholipid vesicles
Activity coefficients of $CaCl_2$ and $MgCl_2$ in the presence of dipalmitoylphosphatidylcholine–phosphatidylinositol vesicles in aqueous media (Reboiras) 101
Photodynamic treatment
Investigation of the combined effect of photodynamic cell treatment and hyperthermia by transmembrane resting potential measurement of human skin fibroblasts (Krammer, Heidegger) 109
Photoeffects
Photoelectric response of bilayer lipid membrane doped with some metallochlorophylls (Xiao et al.) 125
Platinum working electrode
A study on reduction potentials of porcine and bovine superoxide dismutase and dissociation of bridging imidazolate (Qian et al.) 285
Poly-L-lysine fractions
Polylysine supports electrofusion (Gröbner et al.) 181
Polyvinyl alcohol
Immobilization of glucose oxidase in the composite membrane of regenerated silk fibroin and poly(vinyl alcohol): application to an amperometric glucose sensor (Liu et al.) 303
Potassium accumulation
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 14. Comparison of K^+ uptake characteristics in anaerobically grown cells performing glycolysis or nitrate/nitrite respiration: role of the respiratory chain (Trchounian et al.) 13

An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 15. K^+-uptaking activity in glycolysing *Trk* mutants (Trchounian, Ogandjanian) 161
Process control
Deconvolution of the dielectric spectra of microbial cell suspensions using multivariate calibration and artificial neural networks (Nicholson et al.) 185
Protein denaturation
Dynamic spectroelectrochemical measurement for the conformational transition of cytochrome c induced by bromopyrogal red (Zhu et al.) 95
Protonophoric acivity
Protonophoric activities of helioferin and pamamycin, lipophilic tertiary amine antibiotics from *Mycogone rosea* and *Streptomyces aurantiacus* (Grigoriev et al.) 291
Pulse dependence
Effect of high-voltage electric pulses on yeast cells: factors influencing the killing efficiency (Gášková et al.) 195
Purine bases
Voltammetric studies of purine bases and purine nucleosides with copper (Correia dos Santos et al.) 55
Purine nucleosides
Voltammetric studies of purine bases and purine nucleosides with copper (Correia dos Santos et al.) 55
Purine riboside
Electrochemical and enzymatic study of 2-chloro-2′-deoxyadenosine (antileukemic agent) and related compounds (Czochralska et al.) 241

Radical intermediate
Reaction intermediates of a dihydropyridine derivative of 2′,3′-dideoxycytidine related to AIDS dementia studied by laser flash photolysis (Kawczynski et al.) 263
Redox potentials
Electron transfer between cytochrome c and copper enzymes (Jin et al.) 221
Regulatory action
Electron transfer mechanism for regulatory action by nitric oxide (Kovacic) 155
RF radiation
Effects of isothermal 2.45 GHz microwave radiation on the mammalian cell cycle: comparison with effects of isothermal 27 MHz radiofrequency radiation exposure (Cleary et al.) 167

Saccharomyces cerevisiae
Effect of high-voltage electric pulses on yeast cells: factors influencing the killing efficiency (Gášková et al.) 195
Self-assembled monolayer
An ion-gate response of the cysteine-containing dipeptide monolayers formed on a gold electrode. The effects of alkaline earth ions (Takehara et al.) 135
Self-assembly
Biophysical aspects of agar-gel supported bilayer lipid nembranes: a new method for forming and studying planar bilayer lipid membranes (Lu et al.) 275
Silk fibroin
Immobilization of glucose oxidase in the composite membrane of regenerated silk fibroin and poly(vinyl alcohol): application to an amperometric glucose sensor (Liu et al.) 303
Smooth muscle cells
Membrane potential of smooth muscle cells of human allantochorial placental vessels (Ibrahim et al.) 203
Solid support
Electrostriction of biotin-streptavidin-modified bilayer lipid membranes on a metal support (Hianik et al.) 235
Stabilization of bilayer lipid membranes on solid supports by trehalose (Hianik et al.) 299
Solid tumour
Changing electrode orientation improves the efficacy of electrochemotherapy of solid tumors in mice (Serša et al.) 61
Spectroelectrochemistry
Dynamic spectroelectrochemical measurement for the conformational transition of cytochrome c induced by bromopyrogal red (Zhu et al.) 95
Static and extremely low frequency magnetic fields
A study on magnetic field effects on fibroblast cultures. Part 2. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on free-radical processes in fibroblast cultures (Kula, Dróżdż) 27
Static magnetic field
A study of magnetic field effects on fibroblast cultures. Part 1. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on vital functions of fibroblasts (Kula, Dróżdż) 21
Stochastic resonance
Biased Brownian motion as the operating principle for microscopic engines (Bier, Astumian) 67
Streptavidin
Electrostriction of biotin-streptavidin-modified bilayer lipid membranes on a metal support (Hianik et al.) 235
Stripping voltammetry
Voltammetric studies of purine bases and purine nucleosides with copper (Correia dos Santos et al.) 55
Superoxide dismutase
A study on magnetic field effects on fibroblast cultures. Part 2. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on free-radical processes in fibroblast cultures (Kula, Dróżdż) 27
A study on reduction potentials of porcine and bovine superoxide dismutase and dissociation of bridging imidazolate (Qian et al.) 285
Supported BLMs
Biophysical aspects of agar-gel supported bilayer lipid nembranes: a new method for forming and studying planar bilayer lipid membranes (Lu et al.) 275
Behaviour of β_2-microglobulin in the electrical double layer of the mercury|solution interface (Vidić et al.) 129

Tradescantia virginiana
Application of a multifunctional microelectrode to the in vivo analysis of the K^+ response to CO_2 stress (Saito, Matsuoka) 115
Transcription
Electromagnetic field stimulation of biosynthesis: changes in c-*myc* transcript levels during continuous and intermittent exposures (Lin et al.) 215
Transmembrane potential
Investigation of the combined effect of photodynamic cell treatment and hyperthermia by transmembrane resting potential measurement of human skin fibroblasts (Krammer, Heidegger) 109
Trehalose stabilization
Stabilization of bilayer lipid membranes on solid supports by trehalose (Hianik et al.) 299
TrkG mutant
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 14. Comparison of K^+ uptake characteristics in anaerobically grown cells performing glycolysis or nitrate/nitrite respiration: role of the respiratory chain (Trchounian et al.) 13
Trk mutants
An electrochemical study of energy-dependent potassium accumulation in *E. coli*. Part 15. K^+-uptaking activity in glycolysing *Trk* mutants (Trchounian, Ogandjanian) 161

Vacuolar membrane
Application of a multifunctional microelectrode to the in vivo analysis of the K^+ response to CO_2 stress (Saito, Matsuoka) 115
Voltammetry
Electrochemical evaluation of avidin–biotin interaction using *N*-iodoacetyl-*N*-biotinylhexylenediamine (Sugawara et al.) 309

Wound healing
Effects of direct constant current (DC) on keratinocytes in vitro (Jerčinović et al.) 209

Yeast cell
Effect of high-voltage electric pulses on yeast cells: factors influencing the killing efficiency (Gášková et al.) 195

Zn, Fe, Cu ions
A study on magnetic field effects on fibroblast cultures. Part 2. The evaluation of the effects of static and extremely low frequency (ELF) magnetic fields on free-radical processes in fibroblast cultures (Kula, Dróżdż) 27